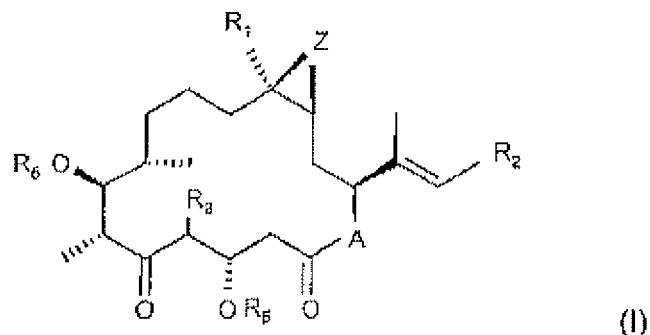


Amendments to the Claims:

Listing of Claims:

Claim 1 -10 Cancelled.

Claim 11 (previously presented): A process for the preparation of an epothilone of formula I,



wherein

A represents O or NR7[[],];

R1 is hydrogen or lower alkyl which is unsubstituted or substituted by hydroxy, lower acyloxy, lower alkoxy, halogen, amino, lower alkyl amino, di-lower alkyl amino or lower acyl amino[[],];

R2 is unsubstituted or substituted heteroaryl having at least one nitrogen atom[[],];

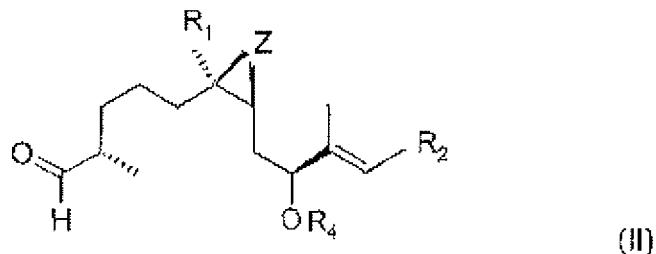
R3 represents hydrogen or lower alkyl[[],];

R5 and R6 are hydrogen[[],]; and

R7 is hydrogen or lower alkyl[[],]; and

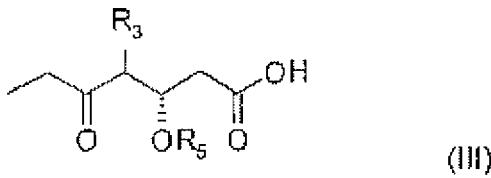
Z is O or a bond[[],]; or a pharmaceutically acceptable salt thereof; comprising the steps of:

(a) reacting an aldehyde of formula II

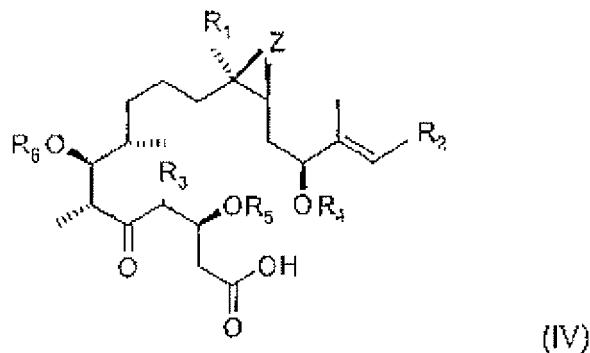


wherein R1, R2 and Z have the meanings as provided above for a compound of formula I and

R4 is a protecting group, with an ethylketone of formula III,



wherein R₅ is H or a protecting group different or identical to R₄ and R₃ has the meaning as provided above for a compound of formula I, to provide the aldol of formula IV,



wherein R₁, R₂, R₃ and Z have the meanings as provided above for a compound of formula I, R₄ a protecting group, R₅ is H or a protecting group different or identical to R₄ and R₆ is hydrogen[[],];

(b) reacting the aldol of formula IV with a reagent capable to introduce a protecting group which is different or identical to R₄ furnishing a carboxylic acid of formula IV,
wherein R₁, R₂, R₃ and Z have the meanings as provided above for a compound of formula I, R₄ a protecting group and R₅ is H or R₅ and R₆ are protecting groups different or identical to R₄[[],];

(c) reacting the carboxylic acid of formula IV with a reagent capable to remove the protecting group R₄ under conditions which do not result in the removal of the protecting groups R₅ and R₆ providing a carboxylic acid of formula IV,
wherein R₁, R₂, R₃ and Z have the meanings as provided above for a compound of formula I, R₄ is hydrogen and R₅ is H or R₅ and R₆ are protecting groups,

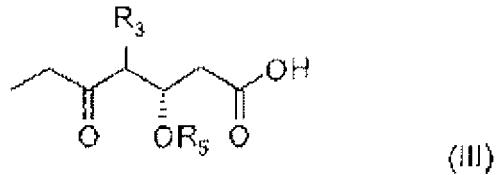
(d) macrolactonizing the carboxylic acid of formula IV providing the epothilone of formula I,
wherein R₁, R₂, R₃ and Z have the meanings as provided above for a compound of formula I, A is O and R₅ is H or R₅ and R₆ are protecting groups[[],];

(e) reacting the epothilone of formula I with a reagent capable of removing the protecting groups R₅ and R₆ furnishing an epothilone of formula I,

wherein R₁, R₂, R₃, R₅, R₆ and Z have the meanings as provided above for a compound of formula I and A is O[[],]; and

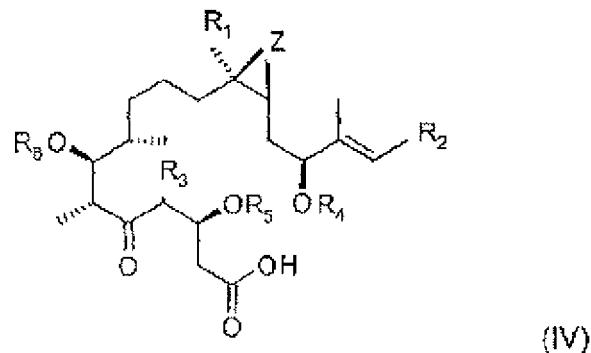
(f) optionally reacting the epothilone of formula I into an epothilone of formula I wherein R₁, R₂, R₃, R₅, R₆ and Z have the meanings as provided above for a compound of formula I and A is NR₇, wherein R₇ is hydrogen or lower alkyl.

Claim 12 (original): An ethylketone of formula III,



wherein R₃ has the meaning as provided above for a compound of formula I and R₅ is hydrogen or a protecting group.

Claim 13 (previously presented): An aldol of formula IV,



R₁ is hydrogen or lower alkyl which is unsubstituted or substituted by hydroxy, lower acyloxy, lower alkoxy, halogen, amino, lower alkyl amino, di-lower alkyl amino, lower acyl amino,

R₂ is unsubstituted or substituted heteroaryl[[],];

R₃ represents hydrogen or lower alkyl[[],];

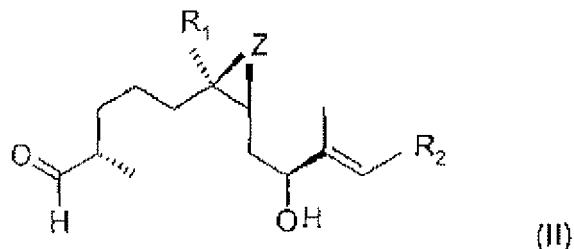
R₄ is hydrogen or a protecting group[[],];

R₅ is a protecting group different or identical to R₄[[],];

R₆ is hydrogen or a protecting group different or identical to R₄[[],]; and

Z is O or a bond.

Claim 14 (previously presented): A process for the preparation of an aldehyde of formula II



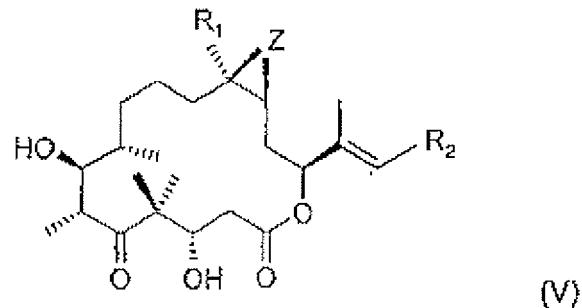
wherein

R₁ is hydrogen or lower alkyl which is unsubstituted or substituted by hydroxy, lower acyloxy, lower alkoxy, halogen, amino, lower alkyl amino, di-lower alkyl amino, lower acyl amino[[],];

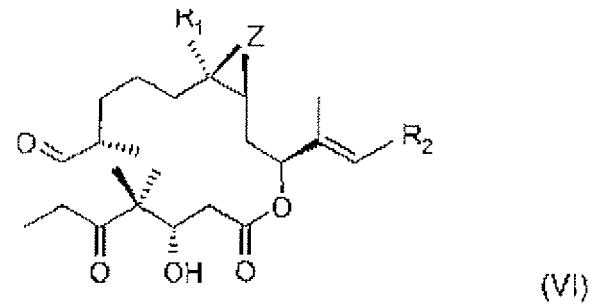
R₂ is unsubstituted or substituted heteroaryl[[],];

Z is O or a bond[[],]; comprising the steps of:

(a) reacting an epothilone of formula V



wherein the radicals R₁, R₂ and Z have the meanings as provided for a compound of formula II above, with a reagent effecting a retro-aldol reaction furnishing an ester of formula VI



wherein the radicals R₁, R₂ and Z have the meanings as provided for a compound of formula II above, which ester is hydrolyzed in a second step into its components, 4,4-dimethyl-3-hydroxy-5 oxo-heptanoic acid and the aldehyde of formula II as defined above.

Claims 15-22 Cancelled.